



Thrive Home Builders

Z.E.N. 2.0 Collection | Denver, CO | ThriveHomeBuilders.com



Photos courtesy of Thrive Home Builders

"I love that it's zero energy." Home owner



PROJECT DATA

- **Layout:** 5 bdrm, 4.5 bath, 2 fl + bsmt, 3,945 ft²
- **Climate:** IECC 5B, cold
- **Completed:** May 2017
- **Category:** production

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 38; with PV 4
- **Annual Energy Costs:** without PV \$1,450; with PV \$-50
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$2,350; with PV \$3,900
- **Annual Energy Savings:** without PV 8,500 kWh, 500 therms; with PV 21,100 kWh, 500 therms
- **Savings in the First 30 Years:** \$190,600

CONTACT

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KEY FEATURES

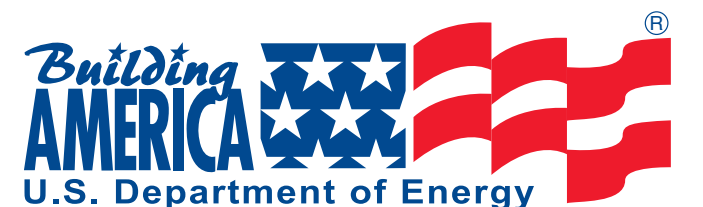
- **Walls:** Double walls, staggered studs at 24", 2.5" space between walls, 2-stud open corners, right-sized window headers, open framed wall intersections; R-40.7 total wall, closed-cell spray foam, drywall, ½" OSB sheathing, house wrap, fiber cement siding.
- **Roof:** Ice-and-water shield; waterproof underlayment; metal drip edge; 30-yr asphalt shingles.
- **Attic:** Vented attic, R-50 blown-in fiberglass.
- **Foundation:** Unfinished basement with R-15 unfaced batts.
- **Windows:** Double-pane, argon-filled, vinyl frames, U=0.24, SHGC=0.22.
- **Air Sealing:** 2.29 ACH 50.
- **Ventilation:** ERV, balanced, meets ASHRAE 62.2, MERV 6 filter on ERV, MERV 15 filter on air purifier.
- **HVAC:** Heat pump, SEER 18.9, 12.2 HSPF; 97.4% AFUE gas back-up furnace.
- **Hot Water:** Tankless gas water heater with smart recirculation pump, 0.97 EF.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR-rated refrigerator, dishwasher, and exhaust fans.
- **Solar:** 7.93-kW PV system.
- **Water Conservation:** WaterSense fixtures, drought-tolerant species, drip irrigation.
- **Energy Management System:** Battery storage.
- **Other:** Low-VOC paints, low-formaldehyde wood, active radon mitigation, 2 electric vehicle charging stations.



Energy Efficiency &
Renewable Energy



For more information on the **DOE Zero Energy Ready Home** program, go to <http://energy.gov/eere/buildings/zero-energy-ready-home> or scan the QR code.



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